

Freeform Search

Database:	US Pre-Grant Publication Full-Text Database	
	US Patents Full-Text Database	
	US OCR Full-Text Database	
	EPO Abstracts Database	
	JPO Abstracts Database	
	Derwent World Patents Index	
	IBM Technical Disclosure Bulletins	
Term:	19 and extracellular	
Display:	100	Documents in Display Format: -
		Starting with Number 1
Generate:	<input type="radio"/> Hit List <input checked="" type="radio"/> Hit Count <input type="radio"/> Side by Side <input type="radio"/> Image	

Search

Clear

Interrupt

Search History

DATE: Saturday, August 20, 2005 [Printable Copy](#) [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L17</u>	tumor near5 (epitop\$ or antigen\$) near10 fus\$ near10 (cytokine\$ or IL-2 or IL-4 or interleukin\$ or interferon\$)	8	<u>L17</u>
<u>L16</u>	tumor near5 (epitop\$ or antigen\$) near10 (cytokine\$ or IL-2 or IL-4 or interleukin\$ or interferon\$)	1130	<u>L16</u>
<u>L15</u>	il-2 near5 anti-tumor	151	<u>L15</u>
<u>L14</u>	neu near10 IL-2 near20 (fusion or fused or fus\$)	4	<u>L14</u>
<u>L13</u>	neu near10 IL-2	19	<u>L13</u>
<u>L12</u>	L11 and fus\$	1	<u>L12</u>
<u>L11</u>	20020193329	2	<u>L11</u>
	DB=PGPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L10</u>	19 and extracellular	7	<u>L10</u>
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L9</u>	DNA near5 vaccine\$ near20 neu	11	<u>L9</u>
<u>L8</u>	15 and N near terminal	0	<u>L8</u>
<u>L7</u>	L5 and (cancer near vaccine\$ or DNA near vaccine\$)	0	<u>L7</u>

<u>L6</u>	L5 and neu near10 extracellular	2	<u>L6</u>
<u>L5</u>	20040052811	2	<u>L5</u>
<u>L4</u>	(DNA near5 vaccine\$ or cancer near5 vaccine\$) near20 N near neu	2	<u>L4</u>
<u>L3</u>	(DNA near5 vaccine\$ or cancer near5 vaccine\$) near20 neu near10 extracellular	2	<u>L3</u>
<u>L2</u>	(DNA near5 vaccine\$ or cancer near5 vaccine\$) near20 neu	63	<u>L2</u>
<u>L1</u>	(DNA near5 vaccine\$ or cancer near5 vaccine\$) near20 (oncogene\$ or neu)	100	<u>L1</u>

END OF SEARCH HISTORY

BEGIN 5,6,55,154,155,156,312,399,BIOTECH,BIOSCI
>>> 135 is unauthorized

Welcome to DialogClassic Web(tm)

Dialog level 05.06.01D
Last logoff: 16aug05 16:11:55
Logon file001 20aug05 16:01:32

*** ANNOUNCEMENT ***

--UPDATED: Important Notice to Freelance Authors--
See HELP FREELANCE for more information

NEW FILES RELEASED

***Computer and Information Systems Abstracts (File 56)
***Electronics and Communicationss Abstracts (File 57)
***Solid State and Superconductivity Abstracts (File 68)
***ANTE: Abstracts in New Technologies (File 60)
***Civil Engineering Abstracts (File 61)
***Aluminium Industry Abstracts (File 33)
***Ceramic Abstracts/World Ceramic Abstracts (File 335)
***CSA Life Sciences Abstracts (File 24)
***Corrosion Abstracts (File 46)
***Materials Business File (File 269)
***Engineered Materials Abstracts (File 293)
***CSA Aerospace & High Technology Database (File 108)
***CSA Technology Research Database (File 23)
***METADEX(r) (File 32)
***FDAnews (File 182)
***German Patents Fulltext (File 324) ***

RESUMED UPDATING

***Canadian Business and Current Affairs (262)
***CorpTech (559)

Chemical Structure Searching now available in Prous Science Drugs
of the Future (F453), IMS R&D Focus (F445), Beilstein Facts (F390),
and Derwent Chemistry Resource (F355).

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
>>> of new databases, price changes, etc. <<<

* * *

File 1:ERIC 1966-2004/Jul 21
(c) format only 2004 Dialog
*File 1: Updates suspended by ERIC until
Q3, 2005

Set Items Description
--- ----

Cost is in DialUnits
?

BEGIN 5,6,55,154,155,156,312,399,BIOTECH,BIOSCI
>>> 135 is unauthorized
>>>1 of the specified files is not available
20aug05 16:01:55 User208738 Session D1081.1
\$0.80 0.228 DialUnits File1
\$0.80 Estimated cost File1
\$0.10 INTERNET
\$0.90 Estimated cost this search
\$0.90 Estimated total session cost 0.228 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 5:Biosis Previews(R) 1969-2005/Aug W2
(c) 2005 BIOSIS

File 6:NTIS 1964-2005/Aug W1
(c) 2005 NTIS, Intl Cpyrght All Rights Res

File 55:Biosis Previews(R) 1993-2005/Aug W2
(c) 2005 BIOSIS

File 154:MEDLINE(R) 1990-2005/Aug W3
(c) format only 2005 Dialog

File 155:MEDLINE(R) 1951-2005/Aug W3
(c) format only 2005 Dialog

File 156:ToxFile 1965-2005/Aug W3
(c) format only 2005 Dialog

***File 156: ToxFile has been reloaded with the 2005 MeSH.**
Please see HELP NEWS 156 for details.

File 312:CA SEARCH(R) 1987-1991
(c) 1997 American Chemical Society

***File 312: Use is subject to the terms of your user/customer agreement.**

File 399:CA SEARCH(R) 1967-2005/UD=14308
(c) 2005 American Chemical Society

***File 399: Use is subject to the terms of your user/customer agreement.**
Alert feature enhanced for multiple files, etc. See HELP ALERT.

File 8:Ei Compendex(R) 1970-2005/Aug W1
(c) 2005 Elsevier Eng. Info. Inc.

File 24:CSA Life Sciences Abstracts 1966-2005/Jul
(c) 2005 CSA.

File 34:SciSearch(R) Cited Ref Sci 1990-2005/Aug W2
(c) 2005 Inst for Sci Info

File 65:Inside Conferences 1993-2005/Aug W2
(c) 2005 BLDSC all rts. reserv.

File 71:ELSEVIER BIOBASE 1994-2005/Aug W1
(c) 2005 Elsevier Science B.V.

File 73:EMBASE 1974-2005/Aug 19
(c) 2005 Elsevier Science B.V.

File 94:JICST-EPlus 1985-2005/Jun W4
(c) 2005 Japan Science and Tech Corp(JST)

File 98:General Sci Abs/Full-Text 1984-2004/Dec
(c) 2005 The HW Wilson Co.

File 99:Wilson Appl. Sci & Tech Abs 1983-2005/Jul
(c) 2005 The HW Wilson Co.

File 136:BioEngineering Abstracts-1966-2005/Jul (c) 2005 CSA.

File 143:Biol. & Agric. Index 1983-2005/Jul
(c) 2005 The HW Wilson Co

File 144:Pascal 1973-2005/Aug W1
(c) 2005 INIST/CNRS

File 172:EMBASE Alert 2005/Aug 19
(c) 2005 Elsevier Science B.V.

File 266:FEDRIP 2005/Jun
Comp & dist by NTIS, Intl Copyright All Rights Res

File 315:ChemEng & Biotec Abs 1970-2005/Jul
(c) 2005 DECHEMA

File 357:Derwent Biotech Res. 1982-2005/Aug W2
(c) 2005 Thomson Derwent & ISI

File 358:Current BioTech Abs 1983-2005/Jul
(c) 2005 DECHEMA

File 369:New Scientist 1994-2005/Jun W1
(c) 2005 Reed Business Information Ltd.

File 370:Science 1996-1999/Jul W3
(c) 1999 AAAS

***File 370: This file is closed (no updates). Use File 47 for more current information.**

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
 (c) 1998 Inst for Sci Info
 File 35:Dissertation Abs Online 1861-2005/Jul
 (c) 2005 ProQuest Info&Learning
 File 40:Enviroline(R) 1975-2005/Jul
 File 50:CAB Abstracts 1972-2005/Jul
 (c) 2005 CAB International
 File 91:MANTIS(TM) 1880-2005/Jun
 2001 (c) Action Potential
 File 110:WasteInfo 1974-2002/Jul
 (c) 2002 AEA Techn Env.
***File 110: This file is closed (no updates)**
 File 164:Allied & Complementary Medicine 1984-2005/Aug
 (c) 2005 BLHCIS
 File 185:Zoological Record Online(R) 1978-2005/Aug
 (c) 2005 BIOSIS
 File 391:Beilstein Reactions 2005/Q2
 (c) 2005 Beilstein GmbH
 File 467:ExtraMED(tm) 2000/Dec
 (c) 2001 Informania Ltd.
***File 467: F467 no longer updates; see Help News467.**

7.

Set	Items	Description
---	-----	-----

?

S (CYTOKINE? OR IL-2 OR INTERLEUKIN? OR IL-4) (5N) (FUSION OR FUSED) (5N) TUMOR?

Processed 10 of 37 files ...

Processing

Completed processing all files

1293611	CYTOKINE?
9167	IL-2
1319538	INTERLEUKIN?
8241	IL-4
1223331	FUSION
340350	FUSED
5921379	TUMOR?

S1	1553	(CYTOKINE? OR IL-2 OR INTERLEUKIN? OR IL-4) (5N) (FUSION OR FUSED) (5N) TUMOR?
----	------	--

?

S (CYTOKINE? OR IL-2 OR INTERLEUKIN? OR IL-4) (5N) (FUSION OR FUSED) (5N) TUMOR? (5N)

Processing

Processed 10 of 37 files ...

Completed processing all files

1293611	CYTOKINE?
9167	IL-2
1319538	INTERLEUKIN?
8241	IL-4
1223331	FUSION
340350	FUSED
5921379	TUMOR?
475979	EPITOP?
3796388	ANTIGEN?

S2	389	(CYTOKINE? OR IL-2 OR INTERLEUKIN? OR IL-4) (5N) (FUSION OR FUSED) (5N) TUMOR? (5N) (EPITOP? OR ANTIGEN?)
----	-----	---

?

S S2 AND DNA (N) VACCINE?

Processed 20 of 37 files ...

Processing

Completed processing all files

389 S2
6719925 DNA
854500 VACCINE?
35942 DNA(N)VACCINE?
S3 16 S2 AND DNA (N) VACCINE?

?

?

RD S3

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

...completed examining records

S4 9 RD S3 (unique items)

?

>>>'S4.3.1' not recognized as set or accession number

?

Display 4/3/1 (Item 1 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

13904165 PMID: 11591784

A dual-function DNA vaccine encoding carcinoembryonic antigen and CD40 ligand trimer induces T cell-mediated protective immunity against colon cancer in carcinoembryonic antigen-transgenic mice.

Xiang R; Primus F J; Ruehlmann J M; Niethammer A G; Silletti S; Lode H N; Dolman C S; Gillies S D; Reisfeld R A
Department of Immunology, The Scripps Research Institute, La Jolla, CA 92037, USA.

Journal of immunology (Baltimore, Md. - 1950) (United States) Oct 15 2001, 167 (8) p4560-5, ISSN 0022-1767 Journal Code: 2985117R

Contract/Grant No.: CA70320; CA; NCI; CA83856; CA; NCI

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

-more-

?

Display 4/3/1 (Item 1 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

Record type: MEDLINE; Completed

- end of record -

?

Display 4/3/2 (Item 2 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

13834598 PMID: 11507070

Targeted interleukin 2 therapy enhances protective immunity induced by an autologous oral DNA vaccine against murine melanoma.

Niethammer A G; Xiang R; Ruehlmann J M; Lode H N; Dolman C S; Gillies S D ; Reisfeld R A

Department of Immunology, The Scripps Research Institute, La Jolla, California 92037, USA.

Cancer research (United States) Aug 15 2001, 61 (16) p6178-84,

ISSN 0008-5472 Journal Code: 2984705R

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

- end of record -

?

Display 4/9/2 (Item 2 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

13834598 PMID: 11507070

Targeted interleukin 2 therapy enhances protective immunity induced by an autologous oral DNA vaccine against murine melanoma.

Niethammer A G; Xiang R; Ruehlmann J M; Lode H N; Dolman C S; Gillies S D ; Reisfeld R A

Department of Immunology, The Scripps Research Institute, La Jolla, California 92037, USA.

Cancer research (United States) Aug 15 2001, 61 (16) p6178-84,

ISSN 0008-5472 Journal Code: 2984705R

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

-more-

?

Display 4/9/2 (Item 2 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

We demonstrate that a mouse-human chimeric anti-ganglioside GD2-interleukin (IL)-2 fusion protein (ch14.18-IL2) substantially amplifies tumor-protective immunity against murine melanoma induced by an autologous oral DNA vaccine containing the murine ubiquitin gene fused to murine melanoma peptide epitopes gp100(25-35) and TRP-2(181-188). This combination

therapy led to the complete rejection of a lethal challenge with B78D14 murine melanoma cells in six of eight mice and a marked suppression of s.c. tumor growth in the two remaining animals. The tumor-protective immunity was mediated by MHC class I antigen- restricted CD8(+) T cells together with CD4(+) T cell help, which was required only for tumor cell killing in the effector phase of the immune response. A single oral vaccination with the DNA vaccine, which was carried by attenuated Salmonella typhimurium, was equally as effective as three such vaccinations applied at 2-week intervals. The immunological mechanisms involved in this antitumor effect were suggested by a decisively increased secretion of tumor necrosis factor alpha TNFTnTNa and IFN-gamma from CD4(+) and CD8(+) T cells and a markedly

-more-

?

Display 4/9/2 (Item 2 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

up-regulated expression on CD8(+) T cells of high-affinity IL-2 receptor alpha chain (CD25), costimulatory molecule CD28, and adhesion molecule lymphocyte function-associated antigen-2 (LFA-2/CD2). Additionally, the combination therapy induced increased expression of costimulatory molecules B7.1 and CD48 on murine antigen-presenting cells. Taken together, our results suggest that IL-2 targeted to the tumor microenvironment by a specific antibody-IL-2 fusion protein is a potent enhancer of tumor-protective immunity induced by an oral DNA vaccine that may ultimately enhance the chances of success in its clinical application.

Tags: Comparative Study; Female

Descriptors: *Immunotoxins--immunology--IM; *Interleukin-2--immunology--IM; *Melanoma, Experimental--immunology--IM; *Melanoma, Experimental--prevention and control--PC; *Vaccines, DNA--immunology--IM; Administration, Oral; Animals; Antigens, CD80--biosynthesis--BI; CD4-Positive T-Lymphocytes--drug effects--DE; CD4-Positive T-Lymphocytes--immunology--IM; CD4-Positive T-Lymphocytes--secretion--SE; CD8-Positive

-more-

?

Display 4/9/2 (Item 2 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

T-Lymphocytes--drug effects--DE; CD8-Positive T-Lymphocytes--immunology--IM; CD8-Positive T-Lymphocytes--secretion--SE; Chimeric Proteins--administration and dosage--AD; Chimeric Proteins--immunology--IM; Drug Synergism; Epitopes--immunology--IM; Gangliosides--immunology--IM; Humans; Immunotoxins--administration and dosage--AD; Interferon Type II--secretion--SE; Interleukin-2--administration and dosage--AD; Intramolecular Oxidoreductases--immunology--IM; Lymphocyte Activation--immunology--IM; Membrane Glycoproteins--immunology--IM; Mice; Mice, Inbred C57BL; Mice, Knockout; Neoplasm Proteins--immunology--IM; Peptide Fragments--immunology--IM; Recombinant Fusion Proteins--immunology--IM; Tumor Necrosis Factor-alpha--secretion--SE; Vaccines, DNA--administration and dosage--AD

CAS Registry No.: 0 (Antigens, CD80); 0 (Chimeric Proteins); 0 (Epitopes); 0 (Gangliosides); 0 (Immunotoxins); 0 (Interleukin-2); 0 (Membrane Glycoproteins); 0 (Neoplasm Proteins); 0 (Peptide Fragments); 0 (Recombinant Fusion Proteins); 0 (Tumor Necrosis Factor-alpha); 0 (Vaccines, DNA); 0 (melanocyte lineage-specific antigen gp100);

-more-

?

Display 4/9/2 (Item 2 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

65988-71-8 (ganglioside, GD2); 82115-62-6 (Interferon Type II)

Enzyme No.: EC 5.3 (Intramolecular Oxidoreductases); EC 5.3.3.12
(dopachrome isomerase)

Record Date Created: 20010816

Record Date Completed: 20010906

- end of record -

?

Display 4/9/3 (Item 3 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

13660320 PMID: 11300483

Protective immunity against human carcinoembryonic antigen (CEA) induced by an oral DNA vaccine in CEA-transgenic mice.

Xiang R; Silletti S; Lode H N; Dolman C S; Ruehlmann J M; Niethammer A G; Pertl U; Gillies S D; Primus F J; Reisfeld R A

Department of Immunology, The Scripps Research Institute, La Jolla, California 92037, USA.

Clinical cancer research - an official journal of the American Association for Cancer Research (United States) Mar 2001, 7 (3 Suppl) p856s-864s, ISSN 1078-0432 Journal Code: 9502500

Contract/Grant No.: CA42508; CA; NCI; CA70320; CA; NCI; CA83856; CA; NCI

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

-more-

?

Display 4/9/3 (Item 3 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Peripheral T-cell tolerance toward human carcinoembryonic self-antigen (CEA) was broken in CEA-transgenic C57BL/6J mice by an oral CEA-based DNA vaccine. This vaccine, delivered by the live, attenuated AroA- strain of Salmonella typhimurium (SL7207), induced tumor-protective immunity mediated by MHC class I-restricted CD8+ T cells. Activation of these T cells was indicated by increased secretion of proinflammatory cytokines IFN-gamma, interleukin (IL)-12 and granulocyte/macrophage-colony stimulating factor, as well as specific tumor rejection and growth suppression in vaccinated CEA-transgenic mice after a lethal challenge with murine MC38 colon carcinoma cells. These tumor cells were double transfected with CEA and the human epithelial cell adhesion molecule (Ep-CAM)/KSA and consequently served as a docking site for a recombinant antibody-IL2 fusion protein (KSl/4-IL2) recognizing KSA. Importantly, the efficacy of the tumor-protective immune response was markedly increased by boosts with this

-more-

?

Display 4/9/3 (Item 3 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

antibody-IL2 fusion protein, resulting in more effective tumor rejection coupled with increased expression of costimulatory molecules B7.2/B7.2 and intercellular adhesion molecule 1 (ICAM-1) on dendritic cells and intensified release of proinflammatory cytokines IFN-gamma, IL-12, and granulocyte/macrophage-colony stimulating factor from T cells of successfully vaccinated CEA-transgenic C57BL/6J mice. Increased T-cell activation mediated by boosts with KS1/4-IL2 fusion protein after tumor cell challenge was further indicated by expanded expression of T-cell activation markers CD25, CD28, CD69, and LFA-1. The application of such CEA-based DNA vaccines and its further improved versions may ultimately prove useful in combination therapies directed against human carcinomas expressing CEA self-antigens.

Tags: Research Support, Non-U.S. Gov't; Research Support, U.S. Gov't, P.H.S.

Descriptors: *Cancer Vaccines; *Carcinoembryonic Antigen--metabolism--ME; *Vaccines, DNA; Animals; Antigens, Neoplasm--metabolism--ME; Cell Adhesion

-more-

?

Display 4/9/3 (Item 3 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

Molecules--metabolism--ME; Colonic Neoplasms--metabolism--ME; Cytokines--metabolism--ME; Granulocyte-Macrophage Colony-Stimulating Factor--metabolism--ME; Humans; Immunoblotting; Intercellular Adhesion Molecule-1--metabolism--ME; Interferon Type II--metabolism--ME; Interleukin-12--metabolism--ME; Mice; Mice, Inbred C57BL; Mice, Transgenic; Plasmids--metabolism--ME; Recombinant Fusion Proteins--metabolism--ME; Transfection; Tumor Cells, Cultured; Up-Regulation

CAS Registry No.: 0 (Antigens, Neoplasm); 0 (Cancer Vaccines); 0 (Carcinoembryonic Antigen); 0 (Cell Adhesion Molecules); 0 (Cytokines); 0 (Plasmids); 0 (Recombinant Fusion Proteins); 0 (Vaccines, DNA); 0 (tumor-associated antigen GA733); 126547-89-5 (Intercellular Adhesion Molecule-1); 187348-17-0 (Interleukin-12); 82115-62-6 (Interferon Type II); 83869-56-1 (Granulocyte-Macrophage Colony-Stimulating Factor)

Record Date Created: 20010412

Record Date Completed: 20010823

- end of record -

?

Display 4/9/4 (Item 4 from file: 154)

DIALOG(R) File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

13200429 PMID: 11249681

Cytokine gene-engineered vaccines.

Forni G; Boggio K

Department of Clinical and Biological Sciences, University of Turin, Ospedale San Luigi Gonzaga, 10043 Orbassano, Italy.
forni@pasteur.sluigi.unito.it

Current opinion in molecular therapeutics (England) Feb 1999, 1 (1)
p34-8, ISSN 1464-8431 Journal Code: 100891485

Publishing Model Print

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Cytokines modulate immune reactivity and have therefore been used to

-more-

?

Display 4/9/4 (Item 4 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

build cancer vaccines. Experimental vaccination of rodents and humans with cytokine-gene engineered tumor cells, fusion proteins between cytokines and tumor antigens, and their DNA have been shown to induce a significant immune memory, even against poorly immunogenic tumors. This immune memory can prevent tumor growth and cure initial metastases, but is poorly effective against established tumors. To date clinical trials have been confined to patients with advanced tumors; so far they suggest that this approach is safe. (36 Refs.)

Descriptors: *Cancer Vaccines--pharmacology--PD; *Cytokines--genetics--GE; *Vaccines, DNA--pharmacology--PD; Adjuvants, Immunologic--genetics--GE; Adjuvants, Immunologic--therapeutic use--TU; Animals; Cancer Vaccines--genetics--GE; Clinical Trials; Cytokines--therapeutic use--TU; Genetic Engineering; Humans; Immunologic Memory--genetics--GE; Neoplasms--genetics--GE; Neoplasms--immunology--IM; Neoplasms--therapy--TH; Recombinant Fusion Proteins--genetics--GE; Recombinant Fusion Proteins--therapeutic use--TU; Vaccines, DNA--genetics--GE; Vaccines, Synthetic--genetics--GE;

-more-

?

Display 4/9/4 (Item 4 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

13200429 PMID: 11249681

Cytokine gene-engineered vaccines.

Forni G; Boggio K

Department of Clinical and Biological Sciences, University of Turin,
Ospedale San Luigi Gonzaga, 10043 Orbassano, Italy.
forni@pasteur.sluigi.unito.it

Current opinion in molecular therapeutics (England) Feb 1999, 1 (1)
p34-8, ISSN 1464-8431 Journal Code: 100891485

Publishing Model Print

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Cytokines modulate immune reactivity and have therefore been used to

-more-

?

Display 4/9/4 (Item 4 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

build cancer vaccines. Experimental vaccination of rodents and humans with cytokine-gene engineered tumor cells, fusion proteins between cytokines and tumor antigens, and their DNA have been shown to induce a significant immune memory, even against poorly immunogenic tumors. This immune memory

can prevent tumor growth and cure initial metastases, but is poorly effective against established tumors. To date clinical trials have been confined to patients with advanced tumors; so far they suggest that this approach is safe. (36 Refs.)

Descriptors: *Cancer Vaccines--pharmacology--PD; *Cytokines--genetics--GE; *Vaccines, DNA--pharmacology--PD; Adjuvants, Immunologic--genetics--GE; Adjuvants, Immunologic--therapeutic use--TU; Animals; Cancer Vaccines--genetics--GE; Clinical Trials; Cytokines--therapeutic use--TU; Genetic Engineering; Humans; Immunologic Memory--genetics--GE; Neoplasms--genetics--GE; Neoplasms--immunology--IM; Neoplasms--therapy--TH; Recombinant Fusion Proteins--genetics--GE; Recombinant Fusion Proteins--therapeutic use--TU; Vaccines, DNA--genetics--GE; Vaccines, Synthetic--genetics--GE;

-more-

?

Display 4/9/4 (Item 4 from file: 154)

DIALOG(R)File 154:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

Vaccines, Synthetic--pharmacology--PD

CAS Registry No.: 0 (Adjuvants, Immunologic); 0 (Cancer Vaccines); 0 (Cytokines); 0 (Recombinant Fusion Proteins); 0 (Vaccines, DNA); 0 (Vaccines, Synthetic)

Record Date Created: 20010315

Record Date Completed: 20010412

- end of record -

?

Display 4/9/5 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

137336364 CA: 137(23)336364p JOURNAL

DNA gene fusion vaccines against cancer

AUTHOR(S): Zhu, Delin; Stevenson, Freda K.

LOCATION: Molecular Immunology Group, Tenovus Laboratory, Southampton University Hospitals Trust, Southampton, UK, SO16 6YD

JOURNAL: Curr. Opin. Mol. Ther. (Current Opinion in Molecular

Therapeutics) DATE: 2002 VOLUME: 4 NUMBER: 1 PAGES: 41-48 CODEN:

CUOTFO ISSN: 1464-8431 LANGUAGE: English PUBLISHER: PharmaPress Ltd.

SECTION:

CA215000 Immunochemistry

IDENTIFIERS: review DNA vaccine cancer

DESCRIPTORS:

Interleukin 1.beta....

DNA vaccines against cancer in relation to immunogenicity of tumor antigen fused to nonapeptide of

-more-

?

Display 4/9/5 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

CTLA-4(antigen)....

fusion products, with tumor antigens; tumor antigen fusion proteins for DNA vaccines against cancer

Immunization...

genetic; with tumor antigen fusion proteins in DNA vaccination against

cancer
T cell(lymphocyte)....
 helper cell; stimulation by tumor antigen fusion proteins in DNA
 vaccination against cancer
Antigen presentation... Antigen processing...
 of tumor antigen fusion proteins in DNA vaccination against cancer
Human...
 tumor antigen fusion proteins for DNA vaccines against cancer
Vaccines...
 tumor; tumor antigen fusion proteins for DNA vaccines against cancer
Antigens...

-more-

?

Display 4/9/5 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)
(c) 2005 American Chemical Society. All rts. reserv.
 tumor-assocd., fusion products; tumor antigen fusion proteins for DNA
 vaccines against cancer
Antitumor agents...
 vaccines; tumor antigen fusion proteins for DNA vaccines against cancer
CAS REGISTRY NUMBERS:
80295-45-0 tumor antigen fusion products; tumor antigen fusion proteins
 for DNA vaccines against cancer

- end of record -

?

Display 4/9/6 (Item 2 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)
(c) 2005 American Chemical Society. All rts. reserv.

132346612 CA: 132(26)346612d PATENT
**Pharmaceutical composition, containing fragments of an antigenic protein
encoding DNA endowed with anti-tumor effect**
INVENTOR(AUTHOR): Parente, Dino; Di Massimo, Anna Maria; De Santis, Rita
LOCATION: Italy
ASSIGNEE: Menarini Ricerche S.p.A.
PATENT: PCT International ; WO 200025827 A2 DATE: 20000511
APPLICATION: WO 99EP7874 (19991018) *IT 98MI2330 (19981030)
PAGES: 56 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-048/00A
DESIGNATED COUNTRIES: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH;
CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL;
IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK;
MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT;
TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM
DESIGNATED REGIONAL: GH; GM; KE; LS; MW; SD; SL; SZ; TZ; UG; ZW; AT; BE;

-more-

?

Display 4/9/6 (Item 2 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)
(c) 2005 American Chemical Society. All rts. reserv.
CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF;
CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG
SECTION:
CA215002 Immunochemistry
CA203XXX Biochemical Genetics

IDENTIFIERS: DNA cancer vaccine MUC1 tumor antigen

DESCRIPTORS:

Immunostimulants...

adjuvants; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

Animal cell line...

BT20; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

Antitumor agents... cDNA sequences... Cytokines... DNA sequences...

Escherichia coli... Fusion proteins(chimeric proteins)... Molecular cloning ... Mucins... Protein sequences...

-more-

?

Display 4/9/6 (Item 2 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

Mucins...

episialins; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

Animal cell line...

MCF-7; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

Plasmids...

pMRS30; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

Vaccines...

tumor; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

Antigens...

tumor-assocd.; DNA or cDNA sequences encoding MUC-1 tumor antigen and

-more-

?

Display 4/9/6 (Item 2 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

fusion protein as vaccine for cancer therapy

DNA...

vaccine; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

Antitumor agents...

vaccines; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

CAS REGISTRY NUMBERS:

269048-69-3 269048-70-6 269048-71-7 269048-72-8 269048-73-9

269048-74-0 269048-75-1 269048-76-2 269048-77-3 269048-78-4

269058-31-3 amino acid sequence; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

60267-61-0 chimeric; DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

9031-11-2DP fusion protein, DNA or cDNA sequences encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer therapy

-more-

?

Display 4/9/6 (Item 2 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

269048-57-9 269048-58-0 269048-59-1 269048-60-4 269048-61-5
269048-62-6 269048-63-7 269048-64-8 269048-65-9 269048-66-0
269048-67-1 269048-68-2 nucleotide sequence; DNA or cDNA sequences
encoding MUC-1 tumor antigen and fusion protein as vaccine for cancer
therapy
269050-06-8 269050-07-9 269050-08-0 269050-09-1 269050-10-4
269050-11-5 269050-12-6 269050-13-7 269050-14-8 269050-15-9
269050-16-0 269050-17-1 269050-18-2 269050-19-3 269050-20-6
269050-21-7 269050-22-8 269050-23-9 269050-24-0 269050-25-1
269050-26-2 269050-27-3 269053-27-2 unclaimed nucleotide sequence;
pharmaceutical compn., contg. fragments of an antigenic protein
encoding DNA endowed with anti-tumor effect

- end of record -

?

Display 4/9/7 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

10170050 Genuine Article#: 492DP Number of References: 35

**Title: An oral DNA vaccine against human carcinoembryonic antigen (CEA)
prevents growth and dissemination of Lewis lung carcinoma in CEA
transgenic mice**

Author(s): Niethammer AG; Primus FJ; Xiang R; Dolman CS; Ruehlmann JM; Ba Y
; Gillies SD; Reisfeld RA (REPRINT)

Corporate Source: Scripps Clin & Res Inst, Dept Immunol, La Jolla//CA/92037
(REPRINT); Scripps Clin & Res Inst, Dept Immunol, La Jolla//CA/92037;
Vanderbilt Univ, Med Ctr, Nashville//TN/37232; Lexigen Pharmaceut
Corp, Lexington//MA/02173

Journal: VACCINE, 2001, V20, N3-4 (NOV 12), P421-429

ISSN: 0264-410X Publication date: 20011112

Publisher: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON,
OXFORD OX5 1GB, OXON, ENGLAND

Language: English Document Type: ARTICLE

-more-

?

Display 4/9/7 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

Geographic Location: USA

Journal Subject Category: IMMUNOLOGY; MEDICINE, RESEARCH & EXPERIMENTAL;
VETERINARY SCIENCES

Abstract: A DNA vaccine encoding human carcinoembryonic antigen (CEA) broke
peripheral T-cell tolerance toward this tumor self-antigen expressed by
Lewis lung carcinoma stably transduced with CEA in C57BL/6J mice
transgenic for CEA. This vaccine, delivered by oral gavage with an
attenuated strain of Salmonella typhimurium (SL7207), and boosted with
an antibody-IL2 fusion protein, induced tumor-protective immunity
mediated by MHC class I anti gen-restricted CD8(+) T cells, resulting
in eradication of subcutaneous tumors in 100% of mice and prevention of
experimental pulmonary metastases in 75% of experimental animals. Both
CTL and antigen-presenting dendritic cells were activated as indicated
by a decisive increase in their respective activation markers CD2,

CD25, CD28 as well as CD48 and CD80. The antitumor effects of this CEA-based DNA vaccine obtained in prophylactic settings, suggest that

-more-

?

Display 4/9/7 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

this approach could lead to the rational design of effective treatment modalities for human lung cancer. (C) 2001 Elsevier Science Ltd. All rights reserved.

Descriptors--Author Keywords: carcinoembryonic antigen (CEA) ; transgenic mice ; antitumor

Identifiers--Keyword Plus(R): ATTENUATED SALMONELLA-TYPHIMURIUM; TUMOR-ANTIGENS; T-CELLS; FUSION PROTEINS; COLON-CARCINOMA; CARRIER STRAINS; CANCER; LYMPHOCYTES; IDENTIFICATION; INTERLEUKIN-2

Cited References:

BECKER JC, 1996, V183, P2361, J EXP MED
BECKER JC, 1996, V93, P2702, P NATL ACAD SCI USA
BOON T, 1994, V12, P337, ANNU REV IMMUNOL
CLARKE P, 1998, V58, P1469, CANCER RES
COLEY WB, 1991, V262, P3, CLIN ORTHOPAEDICS
DARJI A, 1997, V91, P765, CELL
DARJI A, 2000, V27, P341, FEMS IMMUNOL MED MIC

-more-

?

Display 4/9/7 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

GILLIES SD, 1998, V160, P6195, J IMMUNOL
KAWAKAMI Y, 1996, P3, IMP ADV ONC
KAWAKAMI Y, 1994, V91, P6458, P NATL ACAD SCI USA
LIU Y, 1992, V89, P3845, P NATL ACAD SCI USA
LODE HN, 2000, V105, P1623, J CLIN INVEST
MALOY KJ, 2001, V98, P3299, P NATL ACAD SCI USA
MARINCOLA FM, 1995, V13, P1110, J CLIN ONCOL
MEDINA E, 2000, V30, P768, EUR J IMMUNOL
MEDINA E, 1999, V29, P693, EUR J IMMUNOL
MOINGEON P, 2001, V19, P1305, VACCINE
MORALES A, 1976, V116, P180, J UROLOGY
OFFRINGA R, 2000, V12, P576, CURR OPIN IMMUNOL
PAGLIA P, 1998, V92, P3172, BLOOD
PAN ZK, 1999, V55, P4776, CANCER RES
ROSENBERG SA, 1996, V88, P1635, J NATL CANCER I
RUDD CE, 1996, V4, P527, IMMUNITY

-more-

?

Display 4/9/7 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

SCOTT AM, 1997, V9, P717, CURR OPIN IMMUNOL
SHARKEY RM, 1990, V50, P2823, CANCER RES
THOMPSON JA, 1991, V5, P344, J CLIN LAB ANAL
TSANG KY, 1995, V87, P982, J NATL CANCER I
VANDENEYND B, 1995, V7, P674, CURR OPIN IMMUNOL

VANPEL A, 1995, V145, P229, IMMUNOL REV
VELTRI SE, 1996, V14, P164, STEM CELLS
WANG RF, 1999, V170, P85, IMMUNOL REV
WONG FS, 1996, V183, P67, J EXP MED
WONG JYC, 1999, V5, P3224, CLIN CANCER RES
XIANG R, 1999, V163, P3676, J IMMUNOL
XIANG R, 2001, V7, P856, CLIN CANCER RES

- end of record -

?

Display 4/9/8 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

12865894 EMBASE No: 2004458183

Immunotherapeutic strategies for hepatocellular carcinoma

Butterfield L.H.

AUTHOR EMAIL: butterfieldl@upmc.edu

Gastroenterology (GASTROENTEROLOGY) (United States) 2004, 127/SUPPL.
(S232-S241)

CODEN: GASTA ISSN: 0016-5085

PUBLISHER ITEM IDENTIFIER: S0016508504016178

DOCUMENT TYPE: Journal ; Conference Paper

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 46

There is a continuing need for innovative, alternative therapies for hepatocellular carcinoma (HCC). Immunotherapy for cancer is attractive because of the exquisite specificity of the immune response. Activation of

-more-

?

Display 4/9/8 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

an HCC-specific response can be accomplished by strategies targeting tumor-associated self-antigens (for example, alpha-fetoprotein [AFP]). Gene array studies have added to the list of HCC-specific gene products that can be targeted. Alternatively, the immune response can be targeted against viral antigens in those patients infected with hepatitis B or C virus. Uncharacterized and mutated antigens can also be targeted with whole tumor cell or tumor lysate-based immunization strategies or with vectors coding for genes that make the tumor immunogenic, allowing the immune system to naturally evolve specificity against immunogenic target antigens. Strategies being investigated in animal models include increasing tumor immunogenicity by targeting cytokines or costimulatory molecules to tumor; immunization with tumor cells fused with antigen-presenting cells; adoptive transfer of viral antigen-specific T cells; and targeting AFP-expressing HCC cells by DNA, adenovirus, peptide, and dendritic cell (DC) strategies. Strategies that have been tested in human clinical trials include adoptive transfer of lymphocytes and autologous tumor-pulsed DC as well as 2

-more-

?

Display 4/9/8 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

AFP-based strategies: AFP-derived peptides in Montanide and AFP peptides pulsed onto autologous DC. These trials, testing novel immune-based interventions in HCC subjects, have resulted in immunologic responses and have impacted recurrence and survival in HCC subjects.

DRUG DESCRIPTORS:

tumor antigen; alpha fetoprotein--clinical trial--ct; alpha fetoprotein--drug dose--do; alpha fetoprotein--drug therapy--dt; alpha fetoprotein--pharmacology--pd; gene product; virus antigen; plasmid DNA; DNA vaccine; CD40 ligand--pharmacology--pd; Flt3 ligand--pharmacology--pd; tumor vaccine; antineoplastic agent--clinical trial--ct; antineoplastic agent--drug combination--cb; antineoplastic agent--drug therapy--dt; antineoplastic agent--intraarterial drug administration--ia; antineoplastic agent--pharmacology--pd; doxorubicin--clinical trial--ct; doxorubicin--drug therapy--dt; doxorubicin--pharmacology--pd; cytokine--clinical trial--ct; cytokine--drug combination--cb; cytokine--drug therapy--dt; cytokine

-more-

?

Display 4/9/8 (Item 1 from file: 73)

DIALOG(R) File 73:EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

--intraarterial drug administration--ia; cytokine--intravenous drug administration--iv; cytokine--pharmacology--pd; cytokine--subcutaneous drug administration--sc; gamma interferon--clinical trial--ct; gamma interferon--drug combination--cb; gamma interferon--drug therapy--dt; gamma interferon--intraarterial drug administration--ia; gamma interferon--pharmacology--pd; gamma interferon--subcutaneous drug administration--sc; granulocyte macrophage colony stimulating factor--clinical trial--ct; granulocyte macrophage colony stimulating factor--drug combination--cb; granulocyte macrophage colony stimulating factor--drug therapy--dt; granulocyte macrophage colony stimulating factor--subcutaneous drug administration--sc; interleukin 2--clinical trial--ct; interleukin 2--drug combination--cb; interleukin 2--drug therapy--dt; interleukin 2--intraarterial drug administration--ia; interleukin 2--intravenous drug administration--iv; interleukin 2--pharmacology--pd; interleukin 12--drug therapy--dt; interleukin 4--pharmacology--pd; tumor necrosis factor alpha--clinical trial--ct; tumor necrosis factor alpha--drug combination--cb;

-more-

?

Display 4/9/8 (Item 1 from file: 73)

DIALOG(R) File 73:EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

tumor necrosis factor alpha--drug therapy--dt; BCG vaccine--clinical trial--ct; BCG vaccine--drug therapy--dt; BCG vaccine--intradermal drug administration--dl; keyhole limpet hemocyanin--clinical trial--ct; keyhole limpet hemocyanin--drug therapy--dt; keyhole limpet hemocyanin--pharmacology--pd; adjuvant

MEDICAL DESCRIPTORS:

*liver cell carcinoma--drug therapy--dt; *liver cell carcinoma--therapy--th; *cancer immunotherapy; immune response; gene targeting; Hepatitis B virus; Hepatitis C virus; hepatitis B--etiology--et; hepatitis C--etiology--et; mutation; tumor cell; cell lysate; gene vector; antigen presenting cell; adoptive transfer; antigen specificity; T lymphocyte; dendritic cell; Adenovirus; lymphocyte transfer; cancer survival; cancer recurrence; cancer immunization; drug effect; cytotoxic lymphocyte; lymphokine activated killer cell; liver

metastasis--therapy--th; tumor associated leukocyte; colorectal cancer
--drug therapy--dt; colorectal cancer--therapy--th; human; nonhuman;

-more-

?

Display 4/9/8 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

clinical trial; conference paper; priority journal

CAS REGISTRY NO.: 226713-27-5 (CD40 ligand); 171404-15-2 (Flt3 ligand);

23214-92-8, 25316-40-9 (doxorubicin); 82115-62-6 (gamma interferon);

85898-30-2 (interleukin 2); 138415-13-1 (interleukin 12)

SECTION HEADINGS:

016 Cancer

026 Immunology, Serology and Transplantation

030 Clinical and Experimental Pharmacology

037 Drug Literature Index

048 Gastroenterology

- end of record -

?

Display 4/9/9 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2005 Thomson Derwent & ISI. All rts. reserv.

0320122 DBR Accession No.: 2003-21262

Transcription factor Fos-related antigen 1 is an effective target for a breast cancer vaccine - attenuated Salmonella typhimurium and plasmid-mediated polyubiquitin fusion protein and interleukin-18 gene transfer for mamma cancer nucleic acid vaccine and gene therapy

AUTHOR: LUO YP; ZHOU H; MIZUTANI M; MIZUTANI N; REISFELD RA; XIANG R

CORPORATE AFFILIATE: Scripps Res Inst

CORPORATE SOURCE: Xiang R, Scripps Res Inst, Dept Immunol, 10666 N Torrey Pines Rd, La Jolla, CA 92037 USA

ISSN: 0027-8424 CODEN: 0027-8424; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AME; (2003) 100, 15, 8850-8855

LANGUAGE: English

ABSTRACT: AUTHOR ABSTRACT - Protection against breast cancer was achieved with a DNA vaccine against murine transcription factor Fos-related antigen 1, which is overexpressed in aggressively proliferating D2F2

-more-

?

Display 4/9/9 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2005 Thomson Derwent & ISI. All rts. reserv.

murine breast carcinoma. Growth of primary s.c. tumor and dissemination of pulmonary metastases was markedly suppressed by this oral DNA vaccine, carried by attenuated Salmonella typhimurium, encoding murine Fos-related antigen 1, fused with mutant polyubiquitin, and cotransformed with secretory murine IL-18. The life span of 60% of vaccinated mice was tripled in the absence of detectable tumor growth after lethal tumor cell challenge. Immunological mechanisms involved activation of T, natural killer, and dendritic cells, as indicated by up-regulation of their activation markers and costimulatory molecules. Markedly increased specific target cell lysis was mediated by both MHC class I-restricted CD8(+) T cells and natural killer cells isolated

from splenocytes of vaccinated mice, including a significant release of proinflammatory cytokines IFN-gamma and IL-2. Importantly, fluorescence analysis of fibroblast growth factor 2 and tumor cell-induced vessel growth in Matrigel plugs demonstrated marked suppression of angiogenesis only in vaccinated animals. Taken together, this

-more-

?